CLAIMS

What is claimed is:

1. A method for transmitting signals comprising:

transmitting a data signal over a first wavelength on a single fiber strand; and

transmitting a radio frequency signal over a second wavelength on the same single fiber strand.

2. The method of claim 1 further comprising:

transmitting a plurality of other data signals over the first wavelength; and

transmitting a plurality of other radio frequency signals over the second wavelength.

3. The method of claim 1 further comprising transmitting a plurality of other data signals and other radio frequency signals over other wavelengths on the single fiber strand.

4. The method of claim 1 further comprising transmitting another data signal over a third wavelength on the single fiber strand.

5. The method of claim 1 further comprising transmitting another radio frequency signal over a third wavelength on the single fiber strand.

6. The method of claim 1 wherein the data signal comprises an ethernet based signal.

7. The method of claim 1 wherein the data signal comprises an asynchronous signal.

8. The method of claim 1 wherein the data signal comprises a synchronous optical network based signal.

9. The method of claim 1 wherein the data signal comprises an optical carrier based signal.

10. The method of claim 1 wherein the radio frequency signal comprises a personal communication service signal

11. The method of claim 1 wherein the radio frequency signal comprises a local multipoint distribution system signal

12. The method of claim 1 wherein the radio frequency signal comprises a multipoint multichannel distribution service signal.

13. The method of claim 1 wherein the radio frequency signal comprises an unlicensed radio frequency spectrum signal.

14. The method of claim 1 further comprising connecting the data signal from the first wavelength to a third wavelength.

15. The method of claim 1 further comprising connecting the radio frequency signal from the second wavelength to a third wavelength.

16. The method of claim 1 further comprising connecting the data signal from a first path to a second path.

17. The method of claim 1 further comprising connecting the radio frequency signal from a first path to a second path.

18. A method for transmitting signals comprising:

transmitting a plurality of data signals, each over a corresponding wavelength on a single fiber strand; and

transmitting a plurality of radio frequency signals, each over other corresponding wavelengths on the same single fiber strand.

19. A system for transmitting signals comprising:

a first node configured to transmit a data signal over a first wavelength on a single fiber strand and a radio frequency signal over a second wavelength on the same single fiber strand; and

a second node configured to receive the data signal over the first wavelength and the radio frequency signal over the second wavelength.

20. The system of claim 19 wherein the first node comprises at least one member of a group comprising a switch, a cross connect, a fiber optic transmitter, and a fiber optic receiver.

21. The system of claim 20 wherein the cross connect comprises:

a data matrix configured to connect the data signal over a path; and

a radio frequency matrix configured to connect the radio frequency signal over another path.

22. The system of claim 19 wherein the first node comprises an optical device configured to transmit a mixed optical profile over the single fiber strand.

23. The system of claim 19 wherein the first node comprises at least one member of a group comprising a service node and a point of presence.

24. The system of claim 19 wherein the second node comprises at least one member of a group comprising a switch, a cross connect, a fiber optic transmitter, and a fiber optic receiver.

25. The system of claim 24 wherein the cross connect comprises:

a data signal matrix configured to connect the data signal over a path; and

a radio frequency matrix configured to connect the radio frequency signal over another path.

26. The system of claim 19 wherein the second node comprises an optical device configured to receive a mixed optical profile over the single fiber strand.

27. The system of claim 19 wherein the second node comprises at least one member of a group comprising a service node and a point of presence.

28. The system of claim 19 wherein the second node further is adapted to transmit the data signal on a third wavelength and to transmit the radio frequency signal on a fourth wavelength.

29. The system of claim 28 wherein the third wavelength and the fourth wavelength are on another single fiber strand.

30. The system of claim 19 wherein the first node further is adapted to receive the data signal on a third wavelength and to receive the radio frequency signal on a fourth wavelength.

31. The system of claim 30 wherein the third wavelength and the fourth wavelength are on another single fiber strand.

32. A system for transmitting signals comprising:

a device configured to transmit a data signal over a first wavelength on a single fiber strand and to transmit a radio frequency signal over a second wavelength on the same single fiber strand.

33. A system for transmitting signals comprising:

a data matrix configured to transmit a data signal over a first wavelength on a single fiber strand; and

a radio frequency matrix configured to transmit a radio frequency signal over a second wavelength on the same single fiber strand.

34. The system of claim 33 wherein the data matrix comprises:

a transmitter configured to transmit the data signal over the first wavelength; and

a receiver configured to receive the data signal over a third wavelength and to connect the data signal to the transmitter.

35. The system of claim 34 wherein the first wavelength and the third wavelength are the same.

36. The system of claim 33 wherein the radio frequency matrix comprises:

a transmitter configured to transmit the radio frequency signal over the second wavelength; and

a receiver configured to receive the radio frequency signal over a third wavelength and to connect the data signal to the transmitter.

37. The system of claim 36 wherein the second wavelength and the third wavelength are the same.

38. The system of claim 35 wherein the radio frequency matrix comprises a jumper connecting the receiver to the transmitter.

39. The system of claim 33 wherein the data matrix further is configured to transmit a plurality of other data signals, each over another corresponding wavelength on the single fiber strand.

40. The system of claim 36 wherein the data matrix comprises:

a plurality of transmitters each configured to transmit one of the other data signals over the other corresponding wavelength; and

a plurality of receivers each configured to receive one of the other data signals over a different corresponding wavelength and to connect the data signals to one of the transmitters.

41. The system of claim 33 wherein the radio frequency matrix further is configured to transmit a plurality of other radio frequency signals, each over other corresponding wavelengths on the same single fiber strand.

42. The system of claim 38 wherein the radio frequency matrix comprises:

a plurality of transmitters each configured to transmit one of the other radio frequency signals over the other corresponding wavelength; and

a plurality of receivers each configured to receive one of the other radio frequency signals over a different corresponding wavelength and to connect the radio frequency signals to one of the transmitters.